Using CD-ROM Discs and Caddies

YOUR TASK: Learn how to use a caddy and how to handle and care for your discs.

YOUR OBJECTIVE: Protect your discs. Insert and eject caddies properly so your drive operates without interuption.

**YOUR METHOD:** Practice loading discs into caddies, and caddies into drives.

Plextor's CD-ROM drives use an industry-standard disc caddy to protect the disc from scratches and contamination. A standard caddy is made of plastic and has a metal shutter on its bottom which slides open and shut. Use of a non-standard caddy (e.g., one which lacks a metal shutter on its bottom) is not recommended. For their protection, CD-ROM discs should be stored in their original packaging or in a caddy.
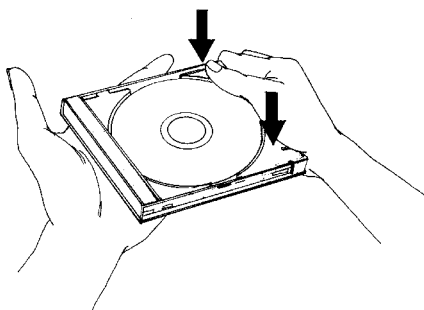
Inserting the Disc into a Caddy

1) To open the lid of the caddy, press the tabs at the side as shown.

2) Place the disc into the caddy with the label facing UP. Be sure to place the disc beneath the edge of the caddy under the arrow mark. Handle the disc by the sides. Don't touch its surface.
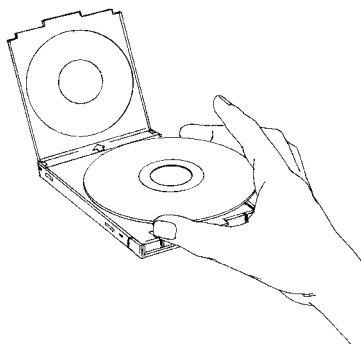
3) Close the lid firmly. But not too hard.

Caution: If the caddy appears defective (e.g., warped, cracked, or bent) do not insert it into the drive. A defective caddy can become stuck inside the drive, requiring the drive's return to your dealer for service. If your caddy appears defective, promptly replace it with a new one.

Handle the caddy as you would any precision component. **Do not:**

✗ Allow moisture or dust/contamination either in or on the caddy.

✗ Store the caddy in a location subject to direct sunlight, high temperature, or high humidity.

✗ Drop the caddy or subject it to shock.

✗ Open the shutter manually. The caddy's shutter opens automatically when the caddy is inserted into the CD-ROM drive.

Loading the Caddy into the Drive

1. Open the drive's door.

2. Carefully insert the caddy in the direction shown, with the arrow mark facing the drive.

3. Push the caddy into the drive until the caddy drops into place.

Hint: *You need use only one hand to insert the caddy into the drive. This is easily accomplished by placing the front portion of the caddy on top of the lip of the drive's door. You can press down lightly to open the drive's door, then slide the caddy into the drive.*

Arrow Mark
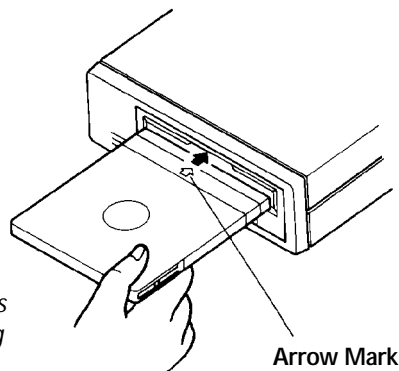
Removing the Caddy from the Drive

1) Push the Eject button. The caddy will eject from the drive in 2--3 seconds.

2) Pull the caddy straight out of the drive.

3) If the caddy will not eject from the drive after pushing the eject button, you should be able to remove the caddy from the drive by using the Emergency Eject button. Turn off power to the drive. Insert a paper clip into the Emergency Eject hole. The caddy should now eject from the drive. Please contact Plextor's Technical Support Department before attempting to rein-sert the caddy into the drive.

Cleaning the Disc

If the disc is merely dusty, you may use a commercially available dust removal spray such as Dust-Off or Vari-Air to blow dust particles off the disc.

After removing the dust particles, you may wipe the disc using a clean soft cotton cloth. Use a straight-line motion, wiping *from the center out.* Do *not* wipe the disc in a circular motion.
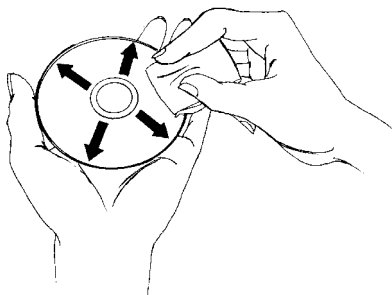
If a disc becomes dirty or soiled with grease or other contaminants not removable by wiping, you may clean the disc with a CD-ROM disc cleaner available at most computer dealers. Follow the directions packaged with the cleaner.

Hint: *Keeping your CD-ROM disc in a caddy at all times will prevent the disc from becoming dirty or damaged.*

How to Play Music CDs on your Drive

YOUR TASK: Learn how to use your CD-ROM drive so that it can also play music CDs.

YOUR OBJECTIVE: Increase functionality of your drive. Provide musical accompaniment for presentations. Goof off at work.

YOUR METHOD: A variety exists for you to choose from. You can use anything from very basic, bare bones music CD software utilities up to software utilities which rival or surpass the capabilities of the CD player attached to your stereo system.

1) The most basic method is to put your CD-ROM drive in Music CD Player Mode. To do so, first make sure that power to your drive is turned on. No drivers need to be loaded for the drive to operate in Music CD Player Mode.

   With no CD in the drive, press and hold the eject button for 5-10 seconds. The on/busy light will blink rapidly for a moment confirming that your drive is now in Music CD Player mode. If you insert a CD into a caddy, then insert the caddy into the drive, the drive will begin to play music from the disc's first track. To skip to the next track, quickly press the drive's eject button. To eject the caddy from the drive, press and hold the Eject button until the CD ejects.

   To leave Music CD Player Mode, simply insert a data CD into your CD-ROM drive.

2) If you are a PC owner running Windows, you can use the Media Player found in the Accessories group. To do so you must first load the [MCI] CD Audio driver. Find the disks on which you received Windows, then follow these steps:

   a) Insert a music CD into your CD-ROM drive.

   b) In Windows, select "Program Manager".

   c) In "Program Manager," select the "Main" group.

   d) In the "Main" group, select "Control Panel."

   e) In "Control Panel," select "Drivers."

f) Select "Add. . . "

g) Move the highlight bar down to "[MCI] CD Audio."

h) Select "OK."

You then will be instructed to insert one of your Windows disks into your floppy drive. After loading the proper device driver, Windows should send you the message, "One CD-ROM drive detected. Installation complete." If this step fails, verify that the CD-ROM drive is operating properly.

Once the driver is successfully loaded, you can run Media Player in your Accessories group. Select Media Player, then pull down the menu under the DEVICE heading and select "CD Audio." You now can use Media Player's basic controls to play music CDs on your CD-ROM drive.

3) If you are a PC owner and want greater functionality than what Media Player can provide, you can use a program such as Animotion's MCS CDMaster (which usually comes bundled with Future Domain SCSI interface boards), CD Player (which usually comes bundled with Adaptec SCSI interface boards), or CD Audio (which is part of the CorelSCSI software package). These utilities allow you to control your CD-ROM drive much like a fully featured audio CD player (e.g., you can program tracks, fast-forward, see the length of each track in minutes and seconds, etc.).

4) Mac users can run a program such as CDT Remote (which typically is included with FWB's CD-ROM device driver) or Music Box (which typically is included with Trantor's CD-ROM device driver).

In order to hear the music CD your drive is playing, you can plug a pair of stereo headphones or self-powered speakers into the stereo mini-jack on the drive's front panel. You also can connect your drive to an audio amplifier as shown on the next page.

PLEASE NOTE: The volume control wheel on the front panel of your drive adjusts only the sound level of the headphone jack. It has no impact on the volume level of the rear panel audio outputs.

PX-43CH

Stereo Mini-Plug

Audio Amplifier

Audio Input

RCA-Type Plugs

PX-45CH

Audio Amplifier

Audio Input

RCA-Type Plugs
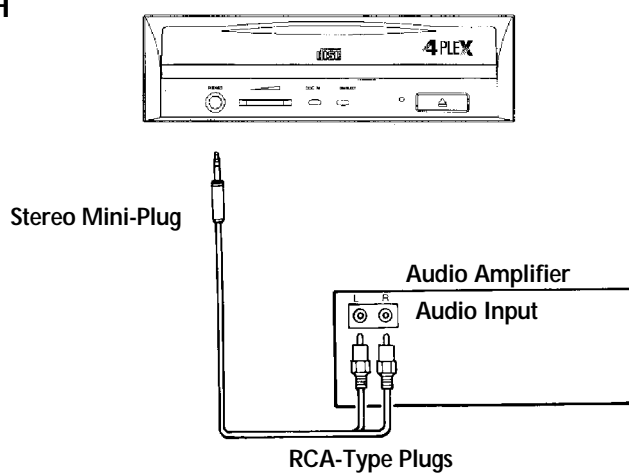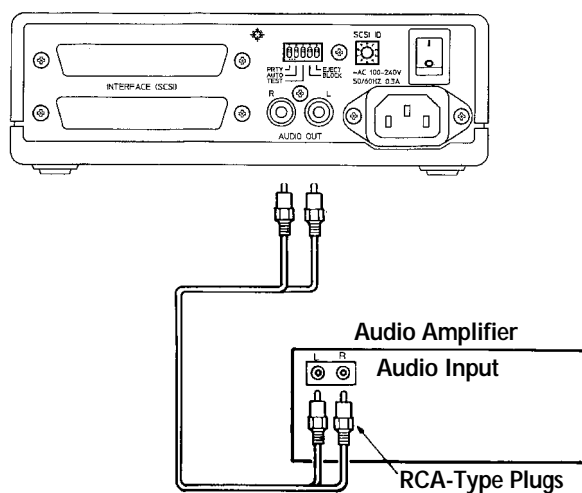
Troubleshooting

YOUR TASK:	Review some of the common problems you may encounter when installing or operating your 4PleX drive.
YOUR OBJECTIVE:	Gain a better understanding of how your drive operates. Attempt to prevent problems before they occur. Quickly fix, on your own, many simple problems rather than wait for assistance from a Plextor representative.
YOUR METHOD:	Read this entire section. Many of the problems discussed happen only rarely. Many may seem as if they do not pertain to you. However, if you are familiar with the variety of problems that <u>can</u> occur, you will be better prepared to deal with them if they happen to you.

If you experience trouble with your 4PleX drive, follow these guidelines:

PC Users:

1) Most SCSI interface boards can sense when a problem has occurred and will generate an error message on your computer. Take note of this message. Then, run the test (diagnostic) program that probably is included with the device drivers for your SCSI interface board. Follow the instructions given in the SCSI interface board's manual. If the information provided by the error message and test program is not sufficient for you to fix the problem, proceed to step #2.

2) If your problem occurs during or immediately after the drive's installation, read Section 13.1 – PCs: Initial Installation. If your problem occurs after you had run the drive successfully for an extended period, read Section 13.2 –– PCs: Existing Installations.

3) Attempt to match the problem you are having with the entries listed beneath SYMPTOMS. Then narrow your search by checking to see if the ADDITIONAL SYMPTOMS apply to you, as well. Because different SCSI interface boards generate differently worded error messages, the messages displayed by your computer may differ from those shown on the following pages.

Apple Computer Users:

Read Section 13.3 ---- Apple Computers

Technical Support

If you still cannot solve your problem after reviewing the relevant sections of this chapter, please contact Plextor's Technical Support Department. See Chapter 14 for information on how to prepare for, and then make contact with, Plextor's Technical Support staff.

13.1 IBM Compatibles: Initial Installation

Symptoms

- No sound when running a CD-ROM program

Additional Symptom

No sound when playing a music CD

Possible Causes and Solutions

Application does not use CD-Audio

There are two types of audio you may encounter when using CD-ROMs:

1) Sound Card Audio:

   This comes from data (e.g., .WAV or .MID files) which is transferred from your CD-ROM disc, into your computer, and is translated by your sound-board into sound. If you do not have a soundboard, you will not be able to hear this form of audio.

2) CD Audio:

   This comes from data that is translated directly by your CD-ROM drive into sound. You do not need a soundboard to hear this audio. You can hear this audio by plugging a set of headphones or powered speakers into the audio jack on the front of your drive.

One reason, then, that you might not hear sound when playing a CD-ROM disc is that a soundboard is required. These discs use only sound card audio, not CD audio.

To help you determine if you are having a soundboard problem, or a CD Audio problem, try playing a music CD in your CD-ROM drive. If you can hear music (through headphones or speakers connected to the audio jack on the front of your drive), the CD-ROM disc you had played may require the use of a soundboard in order to hear sound. If possible, check the manual that came with the CD-ROM disc and see if the use of a soundboard is recommended or required.

If you have a soundboard, can hear a music CD when it is played, but cannot hear sound when you play a CD-ROM disc, you may have configured your soundboard incorrectly. Check the troubleshooting section of your soundboard manual for further advice. If you have a soundboard but you cannot hear a music CD when it is played, check the following points:

Improper/missing audio cable

If you use a soundboard, you must connect the soundboard to your CD-ROM drive with an audio cable. See page 33 to ensure you have properly installed this audio

cable. If you have a soundboard and CD-ROM drive, but lack an audio cable, contact one of the companies listed on page 65, or Plextor's Technical Support Department, for information on where a cable can be purchased.

Device drivers need to be updated

If you can hear a music CD in your CD-ROM drive when it is in Music CD Player mode (see Chapter 12), but you cannot hear a music CD with another music CD utility (e.g., Animotion's MCS CDMaster, Trantor's MusicBox, CorelCD), your device drivers may need to be updated. Contact your SCSI interface board or soundboard manufacturer and verify that their device drivers fully support your 4PleX drive. If they do <u>not</u>, installing "universal" drivers such as those supplied in CorelSCSI may fix this problem.

Soundboard volume low

If when playing a music CD you do not hear sound even though everything appears to be functioning normally (busy light on drive flickers, the time counter on your audio CD utility is advancing), you may have the mixer settings for your soundboard set too low. Each soundboard has different settings for each input source, including one for CD Audio. Run your soundboard's mixer program and verify that the volume is turned up.

Bad soundboard audio cable

If you have verified that you have made the proper cable connections between your 4PleX drive and soundboard, and you have the correct device drivers installed, but you still do not hear sound when playing a music CD, the problem may rest with your audio cable. It may be defective and need to be replaced.

You can check to see if this is the case by doing the following: unplug the audio cable from the rear of your 4PleX drive. Plug a set of headphones or speakers that you know are good into the jack on the front of the drive. Try to play a music CD. If you now can hear music, you can conclude that you do, in fact, have a bad audio cable.

Symptoms

- Cannot view Photo CD discs
- Can read only first session of a multisession disc
- Receive error messages while reading Photo CD images

Your 4PleX drive is capable of reading Kodak Photo CD multisession discs if you use the appropriate device drivers, and you run a Photo CD viewing program (e.g., Magic Lantern, Kodak's Photo CD Access).

Possible Causes and Solutions

Device drivers need to be updated

Contact your SCSI interface board/soundboard manufacturer and verify that the device drivers you have support your 4PleX drive. If they do not, you may be able to utilize "universal" device drivers, such as those included in CorelSCSI, in order to view multisession discs.

Bad Photo CD disc

If you can see a list of files from your Photo CD (after issuing a DIR command), but cannot read them, or experience errors while reading them, you may have a bad Photo CD disc. Try another Photo CD disc. If it works, you should have the defective disc replaced.

Symptoms

- Invalid Drive Specification
- No Device Found
- No SCSI Interface Board Found or No Response from SCSI Interface Board
- No Drives in Use

Additional Symptom

Error Appears upon Initial Installation of the CD-ROM Drive and Device Driver Software

Possible Causes and Solutions

Improper SCSI Device Driver Installation

Your computer needs a SCSI software device driver to link the SCSI interface board to the CD-ROM drive. If this driver cannot be loaded properly, an error message will normally be displayed on the screen.

Try rebooting the computer. Watch as the CONFIG.SYS file executes and look for an error message to appear. You can press the Control and S keys simultaneously to freeze the display in order to read the error message (use the Control and S combination again to continue).

If the SCSI device driver cannot be loaded properly, either a software or hardware conflict exists. Software conflicts are generally caused by memory managers; hardware conflicts by two peripherals vying for the same DOS address space. Please read the next two paragraphs on software and hardware conflicts.

Software Conflict with Other Device Drivers

The SCSI interface board normally designates the CD-ROM driver as the first device driver loaded by the computer. When the computer has a memory manager (e.g.,

HIMEM.SYS, 386MAX.SYS or QEMM.SYS), in most cases the memory manager is loaded first and the CD-ROM driver loaded directly thereafter.

If other device drivers are loading before the CD-ROM driver, place them after the CD-ROM driver. If the memory manager tries to load the CD-ROM driver into high memory (e.g., DEVICEHIGH or LOADHIGH), disable the function so that the driver is loaded into conventional memory.

Hardware Conflict Between the Interface Board and Your Computer

The SCSI interface board may be in conflict with another peripheral in your computer. Normally, this conflict can be settled by selecting a different address for the SCSI interface board. In some cases, you may wish to select a different address for the conflicting peripheral.

If the driver still does not recognize the interface board, follow these steps:

1) Remove all non-essential peripherals from your computer (e.g., network boards, fax boards, etc.) and their device drivers from the CONFIG.SYS and AUTOEXEC.BAT files.

2) Reboot the computer and ensure that the CD-ROM device driver recognizes the SCSI interface board.

3) Turn off the computer and reinstall each peripheral and its device drivers one at a time.

4) Repeat steps 2 and 3 until the problem reoccurs.

Improper MSCDEX Installation

The Microsoft CD-ROM Extensions (filename: MSCDEX.EXE) are required to run your CD-ROM drive under MS-DOS or DR DOS. If the SCSI driver was successfully loaded, check for proper installation of MSCDEX.EXE by rebooting the computer and watching the AUTOEXEC.BAT file as it executes for an error message.

SCSI Interface Board Not Properly Seated

If the SCSI interface board is not fully seated into the computer's expansion slot, the device driver software will not recognize it. Inspect the interface board where it seats into the connector on your computer's motherboard. There should not be more than a small gap between the interface board and the connector.

Symptom

- Incorrect DOS Version

Possible Causes and Solutions

Conflict between MS-DOS 5.0 and Microsoft's CD-ROM Extensions Version 2.2 or lower

MS-DOS 5.0 users should use Microsoft's CD-ROM Extensions (file name MSCDEX.EXE) Version 2.21 or 2.22. If you do not have either of these versions, and plan to use DOS 5.0 with MSCDEX.EXE Ver 2.2 (or lower), you can resolve this conflict by doing the following:

1) Type the following line into your CONFIG.SYS file:
     DEVICE=C:\DOS\SETVER.EXE

2) Switch to the DOS prompt.

3) Type the following: SETVER MSCDEX.EXE 4.01, then press the enter key.

4) Reboot your computer.

Conflict between MS-DOS 6.0 and Microsoft's CD-ROM Extensions (file name: MSCDEX.EXE) Version 2.21 or lower

MSCDEX.EXE ver. 2.22 (or higher) must be used with DOS 6.0. Use of an earlier version will result in an INCORRECT DOS VERSION message. A copy of MSCDEX.EXE ver. 2.22 is included with DOS 6.0. You can find this file in your C:\DOS directory.

If you previously had loaded MSCDEX.EXE ver. 2.21 (or lower), your computer might still be recognizing this lower version rather than 2.22 (or higher).

To correct this problem, you must edit your AUTOEXEC.BAT file using a text editor or word processor. Your AUTOEXEC.BAT file will probaly contain a line that looks something like this:

     C:\TSCSI\MSCDEX.EXE /D:TSLCD /M:10

In this example, "C:\TSCI" is the path to MSCDEX.EXE. The path name will vary depending on the type of SCSI device driver software you use.

Change only the path of this line in your AUTOEXEC.BAT file so that it finds the updated MSCDEX.EXE file in your DOS directory. This line should be edited to read:

     C:\DOS\MSCDEX.EXE /D:TSLCD /M:10

Save the AUTOEXEC.BAT file and reboot your computer.

Symptoms

- No Device Found
- No SCSI Interface Board Found or No Response from SCSI Interface Board

Additional Symptom

Driver Fails to Recognize the SCSI Interface Board

Possible Cause and Solution

Drive In Check Condition

In some cases, even if you restart the computer by pressing its reset button or the Control, Alt and Del keys simultaneously, the drive does not respond to an inquiry. Try turning the power switches on the drive and computer OFF, then ON. This complete shutdown should fully reset the drive and computer.

Symptom

- CDR101 -- Not Ready Reading Drive [X]

Additional Symptom

All Commands Sent to the Drive Result in CDR101 Error

Possible Causes and Solutions

Defective caddy

A warped or damaged caddy can cause a CDR 101 error message. Try using another caddy and see if this eliminates the problem. Also, be sure to use only an "industry standard" caddy. This is a caddy made of plastic with a metal shutter on its bottom. If you use another type of caddy (e.g., all plastic, but with no metal shutter on its bottom ---- just an opening), you may experience problems.

Defective CD-ROM Disc

A fingerprint or other contaminants or deep scratches on the disc's surface may prevent the drive from reading data. Read Chapter 11 to learn how to clean CD-ROM discs.

If the problem persists, try setting the AUTO switch OFF. This setting reduces the data transfer rate to 150 KB/sec, making it possible to read some marginal data. Normally the transfer rate is 600 KB/sec for the data region of the disc and 150 KB/sec for the audio region. Always turn the drive OFF before changing the setting of the rear-panel switches.

Bad Connection Between the CD-ROM Drive and the SCSI Interface Board

Inspect the cable, drive, and interface board for recessed, broken or bent pins. If a ribbon cable is used, inspect for any signs of distress, such as kinking. Ensure the red stripe side of the ribbon cable plugs into pin 1 on both the drive and the interface board.

Audio CD Disc In the Drive

Plextor CD-ROM drives are capable of playing high-quality audio when used with appropriate audio playback software, or when the drive is set to Music CD Player Mode (see Chapter 12). However, since audio compact discs do not have computer data, typing computer commands while an audio CD is in your drive will result in an error message.

Disc in Caddy Upside Down

Remove disc from caddy and reinsert label side up.

13.2 IBM Compatibles: Existing Installations

Symptoms

- Invalid Drive Specification
- No Device Found
- Drive Not Responding

Additional Symptom

Interface Board Driver Fails to Recognize the CD-ROM Drive

Possible Causes and Solutions

Drive is Not On

If you have a PX-45CH external drive, check that its rear-panel power switch is ON. If the drive is the PX-43CH internal model, ensure the power cord from your computer's power supply is plugged firmly into the drive power conector.

Bad Connection Between the CD-ROM Drive and the SCSI Interface Board

Inspect the cable, drive, and interface board for recessed, broken or bent pins. If a ribbon cable is used, inspect for any signs of distress, such as kinking. Ensure the red stripe side of the ribbon cable plugs into pin 1 on both the drive and the interface board.

Improper SCSI Bus Termination

Ensure that only the last peripheral on the SCSI bus is terminated (see Chapter 7). Some peripherals have a setting marked "termination power" instead of "terminator". Ensure their termination power switches are set correctly.

Symptom	**Additional Symptom**
• CDR 101 -- Not Ready Reading Drive [X]	CD-ROM Drive Responds to Directory (DIR) Command But Cannot Run a Program

Possible Causes and Solutions

Bad Connection Between the CD-ROM Drive and the SCSI Interface Board

Inspect the cable, drive, and interface board for recessed, broken or bent pins. If a ribbon cable is used, inspect for any signs of distress, such as kinking. Ensure the red stripe side of the ribbon plugs into pin 1 on both the drive and the interface board.

Improper SCSI Bus Termination

Ensure that only the last peripheral on the SCSI bus is terminated (see Chapter 7). Some peripherals have a setting marked ''termination power'' instead of ''terminator''. Ensure their termination power switches are set correctly.

Defective CD-ROM Disc

A fingerprint or other contaminants or deep scratches on the disc's surface may prevent the drive from reading data. Read Chapter 11 to learn how to clean CD-ROM discs.

If the problem persists, try setting the AUTO switch OFF. This setting reduces the data transfer rate to 150 KB/sec, making it possible to read some marginal data. Normally the transfer rate is 600 KB/sec for the data region of the disc and 150 KB/sec for the audio region. Always turn the drive OFF before changing the setting of the rear panel switches.

Conflict With a Network Card

Temporarily remove the network card and all related drivers from the AUTOEXEC.BAT and CONFIG.SYS files. Reboot the computer and check that the CD-ROM drivers load successfully.

Conflict with DOS 5.0 EMM386.EXE

The DOS memory manager may be using the address area required by the interface board. (This situation does not apply to interface boards that do not use high memory addressing, such as the Trantor's T-130b/T-160.) If you suspect this problem, edit your CONFIG.SYS file as follows:

    Before: DEVICE=C:\DOS\EMM386.SYS
    After: DEVICE=C:\DOS\EMM386.EXE X=CA00-EC00

The X=CA00-EC00 argument prevents EMM386.SYS from using the address space required by the interface board.

Caddy Has Not Dropped Into Place

Eject the caddy and re-insert, ensuring it drops into the drive. If the caddy is defective, replace it.

Symptom	**Additional Symptom**
• CDR 101 -- Not Ready Reading Drive [X]	Errors Occur Intermittently

Possible Causes and Solutions

Defective CD-ROM Disc

A fingerprint or other contaminants or deep scratches on the disc's surface may prevent the drive from reading data. Read Chapter 11 to learn how to clean CD-ROM discs.

If the problem persists, try setting the AUTO switch OFF. This setting reduces the data transfer rate to 150KB/sec, making it possible to read some marginal data. Normally the transfer rate is 600KB/sec for the data region of the disc and 150KB/sec for the audio region. Always turn the drive OFF before changing the setting of the rear-panel switches.

Drive Not Terminated

If your CD-ROM drive is the only SCSI peripheral attached to your computer or is the last SCSI peripheral in a daisy chain (i.e., along a cable connecting multiple SCSI peripherals to a single SCSI interface board), check that its termination switch is ON. Always turn the drive OFF before changing the setting of the rear-panel switches.

Symptom	**Additional Symptom**
• CDR101 – Not Ready Reading Drive [X]	All Commands Sent to the Drive Result in CDR101 Error

Possible Causes and Solutions

Defective CD-ROM Disc

A fingerprint or other contaminants or deep scratches on the disc's surface may prevent the drive from reading data. Read Chapter 11 to learn how to clean CD-ROM discs.

If the problem persists, try setting the AUTO switch OFF. This setting reduces the data transfer rate to 150 KB/sec, making it possible to read some marginal data. Normally the transfer rate is 600 KB/sec for the data region of the disc and 150 KB/sec for the audio region. Always turn the drive OFF before changing the setting of the rear-panel switches.

Bad Connection Between the CD-ROM Drive and the SCSI Interface Board

Inspect the cable, drive, and interface card for recessed, broken or bent pins. If a ribbon cable is used, inspect for any signs of distress, such as kinking. Ensure the red stripe side of the ribbon cable plugs into pin 1 on both the drive and the interface board.

Audio CD Disc In the Drive

Plextor CD-ROM drives are capable of playing high-quality audio when used with appropriate audio playback software or when the drive is set to Music CD Player Mode (see Chapter 12). However, since audio compact discs do not have computer data, typing standard data commands when an audio CD is in the drive will result in an error message.

Disc in Caddy Upside Down

Remove disc from caddy and reinsert label side up.

Symptom   Additional Symptom

- CDR103 -- Not High Sierra Format   Occurs With Certain Discs Only

Possible Cause and Solution

Incorrect Disc

The disc might be intended for another type of computer, such as a Macintosh or Sun, or it is not mastered in the High Sierra or ISO 9660 formats.

Symptom	Additional Symptom
• CDR103 -- Not High Sierra Format	Occurs Regardless of the Discs Used

Possible Causes and Solutions

Hardware Conflict

If the SCSI interface board uses DMA channels, try changing the selected DMA channel. Valid settings are normally Channel 1 or Channel 3. See the instruction manual for your SCSI interface board.

Memory Manager Conflict

If the SCSI interface board uses memory-mapped addressing, exclude the addresses from the memory manager. See the instruction manual for your SCSI interface board.

Incorrect Version of Microsoft CD-ROM Extensions

Version 2.00 or higher of MSCDEX is required to read a High Sierra or ISO 9660 format disc.

Symptom	Additional Symptom
• Excessive Noise • Disc Heard Jumping	CDR101 Error Message

Possible Causes and Solutions

Defective Caddy

Replace caddy.

Defective CD-ROM Disc

A fingerprint or other contaminants or deep scratches on the disc's surface may prevent the drive from reading data. See Chapter 11 to learn how to clean CD-ROM discs.

If the problem persists, try setting the AUTO switch OFF. This setting reduces the data transfer rate to 150KB/sec, making it possible to read some marginal data. Normally the transfer rate is 600KB/sec for the data region of the disc and 150KB/sec for the audio region. Always turn the drive OFF before changing the setting of the switches.

CD-ROM Drive Set to Test Mode

Turn this switch OFF. The test mode is for factory use only. Always turn the drive OFF before changing the setting of the switches.

Symptom

- Low Performance of CD-ROM Application Software

Possible Cause and Solution

Drive Automatically Set to Standard Throughput (150KB/sec)

Plextor's drives are designed to automatically switch from quad speed throughput (600KB/sec) to double (300KB/sec) and then single (150KB/sec) speed when they encounter a defective, damaged or poorly manufactured disc. The drive then will continue to read data from the disk at double or single speed until a new read command is transmitted to the drive. The drive will then attempt to return to quad speed mode.

13.3 Apple Macintosh

Symptoms

- Invalid Drive Specification
- No Device Found
- Drive Not Responding

Possible Cause and Solution

SCSI Address Conflicts with the Hard Disk Drive

This usually can be corrected by selecting another SCSI address (normally addresses 1 to 6) for your CD-ROM drive. Note: the Macintosh's hard disk uses address 0 and its internal SCSI adapter uses address 7.

Symptom

- Computer Does Not Respond

Possible Cause and Solution

INIT Conflicts

Remove all INITs except those from your System Folder and the ones copied from the CD-ROM device driver disk. If the CD-ROM drive functions correctly, reinstall the INITs one at a time, restarting the Macintosh after each one, until the problem is solved.

Symptom

- Low Performance of CD-ROM Application Software

Possible Cause and Solution

System Set for Virtual Memory

If your Macintosh is using System 7 and is in Virtual Mode, it may exhibit slow performance during real-time graphics and animation. This is because your hard disk drive and CD-ROM drive must use your computer's SCSI bus almost simultaneously. To remedy this, remove Virtual Mode from the system and restart the Macintosh.